DATE: 12/10/2001

ENTERED

PATENT APPLICATION: US/09/848,798A

TIME: 11:15:20

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5 <110> APPLICANT: Siegel, Donald L.

9 <120> TITLE OF INVENTION: Rh(D)-BINDING PROTEINS AND MAGNETICALLY ACTIVATED CELL

SORTING METHOD FOR PRODUCTION THEREOF 11

15 <130> FILE REFERENCE: 09596-42U2

19 <140> CURRENT APPLICATION NUMBER: 09/848,798A

RAW SEQUENCE LISTING

20 <141> CURRENT FILING DATE: 2001-05-04

24 <150> PRIOR APPLICATION NUMBER: 09/240,274

25 <151> PRIOR FILING DATE: 1999-05-02

28 <150> PRIOR APPLICATION NUMBER: 60/028,550

30 <151> PRIOR FILING DATE: 1996-10-11

34 <160> NUMBER OF SEQ ID NOS: 224

38 <170> SOFTWARE: PatentIn Ver. 2.0

42 <210> SEQ ID NO: 1

44 <211> LENGTH: 128

46 <212> TYPE: PRT

48 <213> ORGANISM: Homo sapiens

52 <220> FEATURE:

54 <223> OTHER INFORMATION: anti-Rh(D) chain B01

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72 Ala Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val

40

78 Ala Ala Thr Ala Tyr Asp Gly Lys Asn Lys Tyr Tyr Ala Asp Ser Val

84 Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu Phe

75 70

90 Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Phe Tyr Cys 85

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122 <213> ORGANISM: Homo sapiens

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132 <400> SEQUENCE: 2

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140 Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Ser Phe Ser Ser Tyr

25 142 20

146 Gly Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val

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148
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152 Ser Val Ile Ser Tyr Asp Gly His His Lys Asn Tyr Ala Asp Ser Val
158 Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Lys Thr Leu Tyr
                         70
164 Leu Gln Met Asn Ser Leu Arg Pro Glu Asp Thr Ala Val Tyr Tyr Cys
                                         90
                  · 85
170 Ala Asn Leu Arg Gly Glu Val Thr Arg Arg Ala Ser Val Pro Phe Asp
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                                    105
176 Ile Trp Gly Pro Gly Thr Met Val Thr Val Ser Ser
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196 <223> OTHER INFORMATION: anti-Rh(D) chain C03
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208 Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Ser Phe Ser Ser Tyr
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214 Gly Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
216
             35
220 Ser Val Ile Ser Tyr Asp Gly His His Lys Asn Tyr Ala Asp Ser Val
226 Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Lys Thr Leu Tyr
                         70
                                             75
232 Leu Gln Met Asn Ser Leu Arg Pro Glu Asp Thr Ala Val Tyr Tyr Cys
                    85
238 Ala Asn Leu Arg Gly Glu Val Thr Arg Arg Ala Ser Val Pro Phe Asp
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284
             35
                                 40
288 Ser Val Ile Ser Tyr Asp Gly His Asn Lys Asn Tyr Ala Asp Ser Val
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294 Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Lys Thr Leu Tyr 70 300 Leu Gln Met Asn Ser Leu Arg Pro Glu Asp Thr Ala Val Tyr Tyr Cys 302 85 90 306 Ala Asn Leu Arg Gly Glu Val Thr Arg Arg Ala Ser Ile Pro Phe Asp 105 110 100 312 Ile Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser 115 320 <210> SEQ ID NO: 5 322 <211> LENGTH: 124 324 <212> TYPE: PRT 326 <213> ORGANISM: Homo sapiens 330 <220> FEATURE: 332 <223> OTHER INFORMATION: anti-Rh(D) chain C04 336 <400> SEQUENCE: 5 338 Glu Val Gln Leu Leu Glu Ser Gly Gly Val Val Gln Pro Gly Arg 344 Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Ser Phe Ser Ser Tyr 20 25 350 Gly Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val 40 356 Ala Val Ile Ser Tyr Asp Gly Thr Asn Lys Tyr Phe Ala Asp Ser Val 50 362 Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Lys Thr Leu Tyr 70 368 Leu Gln Met Thr Ser Leu Arg Pro Glu Asp Thr Ala Val Tyr Phe Cys 90 374 Ala Asn Leu Arg Gly Glu Val Thr Arg Arg Ala Ser Val Pro Leu Asp 105 100 380 Ile Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser 382 115 120 388 <210> SEQ ID NO: 6 390 <211> LENGTH: 124 392 <212> TYPE: PRT 394 <213> ORGANISM: Homo sapiens 398 <220> FEATURE: 400 <223> OTHER INFORMATION: anti-Rh(D) chain C08 404 <400> SEQUENCE: 6 406 Glu Val Gln Leu Leu Glu Ser Gly Gly Gly Val Val Gln Pro Gly Arg 408 1 5 10 412 Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Ser Phe Ser Ser Tyr 418 Gly Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val 424 Ala Val Ile Ser Tyr Asp Gly Thr Asn Lys Tyr Phe Ala Asp Ser Val 50 430 Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Lys Thr Leu Tyr 70 75 436 Leu Gln Met Thr Ser Leu Arg Pro Glu Asp Thr Ala Val Tyr Phe Cys RAW SEQUENCE LISTING DATE: 12/10/2001 PATENT APPLICATION: US/09/848,798A TIME: 11:15:20

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438 442 Ala Asn Leu Arg Gly Glu Val Thr Arg Arg Ala Ser Val Pro Leu Asp 100 105 448 Ile Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser 115 456 <210> SEQ ID NO: 7 458 <211> LENGTH: 124 460 <212> TYPE: PRT 462 <213> ORGANISM: Homo sapiens 466 <220> FEATURE: 468 <223> OTHER INFORMATION: anti-Rh(D) chain C10 472 <400> SEQUENCE: 7 474 Glu Val Gln Leu Leu Glu Ser Gly Gly Gly Val Val Gln Pro Gly Arg 480 Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Ser Phe Ser Ser Tyr 486 Gly Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val 492 Ser Val Ile Ser Tyr Asp Gly His His Lys Asn Tyr Ala Asp Ser Val 55 498 Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Lys Thr Leu Tyr 504 Leu Gln Met Asn Ser Leu Arg Pro Glu Asp Thr Ala Val Tyr Tyr Cys 510 Ala Asn Leu Arg Gly Glu Val Thr Arg Arg Ala Ser Val Pro Phe Asp 512 100 105 516 Ile Trp Gly Pro Gly Thr Leu Val Thr Val Ser Ser 518 115 120 524 <210> SEQ ID NO: 8 526 <211> LENGTH: 125 528 <212> TYPE: PRT 530 <213> ORGANISM: Homo sapiens 534 <220> FEATURE: 536 <223> OTHER INFORMATION: anti-Rh(D) chain D01 540 <400> SEQUENCE: 8 542 Glu Val Gln Leu Leu Glu Ser Gly Gly Val Val Gln Pro Gly Arg 548 Ser Leu Arg Leu Ser Cys Val Val Ser Gly Phe Thr Phe Asn Asn Tyr 554 Gly Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val 35 40 560 Ala Val Ile Trp Phe Asp Gly Ser Asn Lys Tyr Tyr Ala Asp Ser Val 566 Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr 70 572 Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys 578 Ala Arg Glu Asn Gln Ile Lys Leu Trp Ser Arg Tyr Leu Tyr Tyr Phe 580 100 105

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598 <213> ORGANISM: Homo sapiens
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608 <400> SEQUENCE: 9
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616 Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Thr Tyr
                                     25
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622 Gly Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
628 Ala Val Ile Trp Phe Asp Gly Ser Asn Lys Glu Tyr Ala Asp Ser Val
                             55
634 Lys Gly Arg Phe Thr Val Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr
                                             75
                         70
640 Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
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646 Ala Arg Glu Glu Val Val Arg Gly Val Ile Leu Trp Ser Arg Lys Phe
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652 Asp Tyr Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser
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666 <213> ORGANISM: Homo sapiens
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672 <223> OTHER INFORMATION: anti-Rh(D) chain D04
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690 Gly Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
696 Ala Asp Ile Trp Phe Asp Gly Ser Asn Lys Asp Tyr Ala Asp Ser Val
702 Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr
708 Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
                     85
714 Ala Arg Asp Trp Arg Val Arg Ala Phe Ser Ser Gly Trp Leu Ser Ala
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                                120
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VERIFICATION SUMMARY

DATE: 12/10/2001 TIME: 11:15:21

PATENT APPLICATION: US/09/848,798A

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